

MOTORS and MOTORING



JUNKED BATTERIES SALVAGED AND SOLD AS NEW PRODUCT

Investigators Find Car Owners May in Some Instances Buy Back Their Own Discarded Equipment.

Batteries looking spick and span enough, but which are in reality nothing but boxes containing the relics of junked batteries, are being marketed to the unsuspecting public, according to investigators who have been probing the situation for the makers of standard batteries.

A thriving business, these investigators say, has been built, so to speak, upon the skeletons of dead batteries. It is waged under numerous names and prices. The practice has grown so widespread that a car owner very easily may buy back his own discarded battery in whole or part, nicely housed in a newly painted box with a name on it as new as the paint.

The operation consists of buying up old batteries, junking them, and salvaging such parts of them as show any bit of life, particularly the plates, and assembling the salvaged parts with a few plates of power, enough to give it a start on its victim. After the few days or weeks the buyer is out his purchase price.

Now an Organized Craft.

The scheme, of course, is not new in the automotive business. It has been worked with variations with years with batteries in an unorganized way, and not serious fashion. The success of the pioneers, combined with the period of high prices, which gave the practice better opportunity to operate, and his wares a better appeal to the car owner, fostered the system. It now represents a genuine menace to the automobilist buying a battery.

Investigators who have torn down these "salvaged" batteries say that in many instances not 5 per cent of the battery represents new material. In view of this fact it is easy for the car owner to see the mechanical expertness to put out these reassembled batteries, and sell them with profit at almost any figure.

Nothing But Junk.

Discarded batteries, of course, are sold entirely as junk and at junk prices. The batteries are torn down and the old plates given a surface semblance of newness. An investment in a few new plates and electrolyte gives the operator his complete manufacturing expenditure. All that remains is to assemble the junk with a few new plates and sell it to an unsuspecting shopper.

With prices for standard batteries down to bedrock, and bogus batteries widespread, it behooves the car owner to be as much concerned toward what is inside the box as the price. The buyer who is not a specialist should realize that perhaps more than in any other article among automotive accessories the word "standard" has vital significance. It is absolutely imperative in buying a battery to buy one sponsored by a name that carries with it respectability, and everything that goes to make the word responsible a real safeguard in the purchase of a battery.

Easy to Deceive.

The opportunities to victimize the purchaser of a battery are more numerous and more easily put over

GRADE CROSSINGS PUT UNDER BAN

Bridges and Underpasses Are to Replace Them on Federal Highways.

Grade crossings must go and they will be eliminated wherever possible on the roads of the federal aid highway system, which will be built as a result of the passage of the federal highway act. When the roads which form the primary or interstate system are constructed, no grade crossings will be allowed to remain that it is at all practicable to avoid. Every effort will be made to make the roads of the secondary system equally safe, but in this case it is recognized that elimination may not be practicable in all cases at this time.

New Policy Popular.

In making this announcement the bureau of public roads, United States Department of Agriculture, and the Federal Highway Administration, are alluding to the fact that the fund is allotted and construction is under way. It is putting into effect a policy which has long been advocated in principle, and the department is now carrying out the policy in a more definite manner. In addition, the policy is in favor of the elimination of grade crossings, and the American Association of Highway Engineers, which has pledged its best efforts to co-operate in the elimination of grade crossings, has been very active in this plan.

Purpose Is to Save Life.

Where crossings are unavoidable, or where local interests justify construction of a highway to cross a railroad line, the road will be so located as to pass over the track or under it. In most instances of this sort the railroad bears one-half of the cost of building the bridge or underpass. The prime object of the department's policy to eliminate grade crossings on federal aid roads is to save lives. It is believed that the policy will involve increased expenditure of construction in the case of some roads, but it is believed that it is justified by the saving of life. During the three years ending 1920, according to the best records available to the department, 4,834 persons were lost at grade crossings in the United States and 10,644 persons were injured.

ETHER STARTS CAR IN COLD WEATHER

University of Alberta Professor Discovers New Mixture for Autoists.

EDMONTON, Alta., February 3.—Prof. Charles A. Robb of the University of Alberta, it is announced, has discovered an ether mixture which solves the problem of starting motor engines in intensely cold weather.

Opportunity for a final test of the preparation came during a recent cold spell when the mercury fell far below zero. A Liberty-12 motor of 400 horsepower was left outdoors all night and was immovably frozen by morning. The actual time taken to start the engine with the new mixture was seven minutes. When the experiment was begun last year it took an hour and a half to start the same engine with the mercury only five degrees below.

The hot water method of warming up a cold motor, it is said, will now be discarded. The discovery will be of great importance to operators of all kind of motor vehicles, from motor trucks in the warmer zones to motor sleds and airplanes in subarctic regions.

It is believed the discovery will solve the problem of aviation in the far north. This country dominated by the Hudson's Bay Company, which has been a problem in the prairie provinces to prosecute its hunt for furs in more remote wildernesses, came into the public eye last year by the oil excitement in the Mackenzie river basin. Aviation in this cold region has been regarded as impracticable because of the difficulty of warming up the engines.

Prof. Robb's discovery, it is claimed, will prove an invaluable contribution to the motor world and is expected to be put to immediate general use.

Akron Tire Center.

More than 75 per cent of all the automobile and truck tires made in the United States during 1921 were manufactured in Akron, according to the Miller Rubber Company, Akron, Ohio.

BUS WHICH MAINTAINED SCHEDULE THROUGHOUT STORM.



Albert Thompson, assisted by Fred Duffield, made commuters living in Cherrydale happy by keeping the bus between Washington and that point running throughout the heavy blizzard and snowstorm.

ORIGIN AND MEANING OF TERMS FOUND IN AUTO LITERATURE

Many Words Coined by French Borrowed Because of Convenience—Definition of "Names."

BY ALBERT N. ATKINSON.

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Although the first automobiles were made in this country, the French took the lead in the new industry because they had imagination, capital, skilled mechanics and some of the best roads in the world. Progress was delayed in England by adverse legislation and in the United States by poor roads over which the weak engines of that period were unable to make much headway. When we finally made our start we found it necessary to invent a lot of new names or else to borrow those which the French had already coined. As the latter was the easier method, the language was immediately enriched by a long list of foreign words, which have become part of our everyday speech—such as chauffeur, chassis, garage, tonneau, limousine, and so on. None of these words was made up from nothing, like the word "gas," which was invented by a chemist, or "kodak," by a manufacturer. They were words in common use in France and were naturally used in the new industry as the best means of communication.

Origins of "Chauffeur."

The word "chauffeur" means a fireman or stoker. A man who fires a boiler is called a "chauffeur" in French. There is a curious survival here which is difficult to explain. The early cars were steamers and required two men to operate them, the "mechanic" and the "chauffeur," the mechanic and the fireman, respectively. But as the word has now acquired the meaning of a driver of an automobile, it will probably last as long as automobiles are used.

But the French dictionary gives another definition of the word which is not so complimentary: a robber. The word "chauffeur" has been the words of marauders who had their own methods of exacting toll

AUTOISTS MAKE RECORD RUN OVER SNOW AND ICE

Men Go 369 Miles in 9 Hours and 15 Minutes in Dash From Pittsburgh to Trenton.

Three hundred and sixty-nine miles over winter roads covered with snow and ice, from Pittsburgh, Pa., to the Mercer factory at Trenton, N. J., in nine hours and fifteen minutes is the record established last week by W. A. Smith, sales manager of Mercer Motors, and Walter Haines, head of the experimental department.

The two tourists were checked out of the William Penn Hotel, Pittsburgh, and checked in at the Stacey-Trent Hotel in Trenton. Sixty-two miles in the morning at Pittsburgh was certified on the sheet, while the Trenton and showed 2:55 in the afternoon.

The Lincoln highway was followed, and while not much deep snow was encountered, the roads in many places were making driving both difficult and treacherous.

The endurance of the drivers can be appreciated when it is realized that 140 miles of the distance is over the Allegheny mountains, the terror of even the summer motorist.

Considerably more snow was found in Ohio when Mr. Smith and Mr. Haines drove to Cleveland on the outgoing trip. They stated that the severe cold weather of the past week had made roads to Cleveland a veritable sheet of ice.

them. I have been told to use heavy grease, but do not know if it is advisable or not.

Answer—A medium grade of grease may be used satisfactorily, provided the case is tight. The only danger is where there is an opening between the timing gear case and the crank case. The grease would work through into the oil base and have a tendency to form carbon in the cylinders.

To the Automobile Editor:

Do the different prices of gasoline along the road indicate a difference in the quality? Some of it seems to have more pep than others. I tested some and it measured 60 degrees.

Answer—The original gasoline for engine use tested 72 degrees, but that is now only a memory. The grade has steadily dropped until not long ago it was only 60 degrees. Present cars have special carburetors and air-warming devices to take care of this low-grade fuel. Undoubtedly the grades do vary from different dealers, but each one sells it at a price which he chooses. Possibly the differences in power you noticed came from better carburetors and air-warming devices.

Answer—The axle may be slightly bent, or there may be a broken bearing or a chip of metal wedged between the teeth of the differential. The differential should be removed and these parts examined. Have this done by an expert, as the differential will be noisy if not properly replaced.

To the Automobile Editor:

There is slight bumping in my right rear wheel that feels as if the tire were flat, although it is fully inflated. Is anything wrong with the axle? It is of the full floating type and I have removed it, but cannot discover the trouble.

Answer—The axle may be slightly bent, or there may be a broken bearing or a chip of metal wedged between the teeth of the differential. The differential should be removed and these parts examined. Have this done by an expert, as the differential will be noisy if not properly replaced.

To the Automobile Editor:

I want to remove the bolts which hold the hub on my front wheel, but they are loose in the wood and turn around with the nut. What is the best way to take them off? V. B. N.

Answer—If you do not care to cut them you may file a slot in the head of a screwdriver or file two flat places on opposite sides, so that the head may be held by a wrench. Clamps or a prick punch will not damage them so much, but are not powerful.

Answer—The timing gears on my car are very noisy and I am unable to quiet them.

Information on Problems Which Bother Auto Owners.

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MOTOR CYCLE NEWS

It's a far cry from hunting foxes and shooting panthers in the jungle of India with the aid of a motor cycle, but that's exactly what H. C. Millet, assistant conservator of forests, Bombay, India, did recently. It was quite by accident that Mr. Millet made his big catch. He and a friend of his had gone out on their mounts for a day's shooting of stag, but the day had been unsuccessful in so far as stag were concerned, and it was not until half an hour before sundown, when Millet, now alone, turning homeward, came upon his prize. He was hurrying along at about thirty-five miles per hour, and leaving an indistinct cloud whirling up from the rear tire like a cyclone, when the panther, an unusually large one, suddenly loomed up before him in the roadway. Since a panther is always worth trying for, Millet managed to bring his machine to a standstill within twenty yards of the beast to unwrap his rifle, and to walk back several yards, all within a few moments. The panther was still lying in the same place as when he had passed, watching Millet with great interest. It took Millet just a second to put a bullet through his next door to his heart. The enraged animal left the ground with a bound, came down, and staggered off into the brush, roaring and then all was still. After he was tracked and found dead, his captor found it necessary to get the help of two natives before he could drag him out to the road. Fortunately for him, the motor cycle bore the load after that, the large animal being tied to the carrier, his head and paws and tail being tied up so that they would not drag on either side.

An old 1912 model American-made motor cycle, which recently won first prize in the Swedish newspaper Afion Bladet's economy competition, one of the most important motor cycle events of the year in that country, is causing quite a sensation among motor cyclists of Sweden. The machine is of the single-cylinder belt-drive variety, and has been ridden for nine years, yet despite this long service is still in the best of condition. It was purchased in Chicago by S. S. Windrow, who received seven years' faithful service from it, and was then sold to its present owner and winner of the economy test, Helge Warner of Stockholm, Sweden, who took it apart piece by piece, and then reassembled it, finding that there was not a sign of wear in any one part of the machine. He later decided to make it a chain-drive machine with footboard and kick starter. He was very successful in making the change, and the old machine has caused quite a bit of surprise on the streets of Stockholm, because of its quick get-away and its apparent power.

In the economy test, this machine won 15.65 meters on a liter of gasoline, which is approximately 114 miles on an American gallon. The next nearest competitor won 4.50 meters, 1.165 meters less, and the third prize winner won 40.48 meters on the same amount of gas.

Maj. Lynn G. Adams, superintendent of the Pennsylvania state police, who has seventy motor cycles as part of their equipment, has just submitted an interesting report of the activities of the force during the first nine months of 1921.

During this time 9,761 arrests were made. Of this number 751 were made among automobile law violators. Fifty-eight were charged with murder; with arson; 763 with robbery, burglary and larceny, while

1,550,000 CARS SOLD.

Auto Production in 1921 Amounted to Total of 1,700,000.

Automobile production by American companies for 1921 amounted to 1,700,000, which 1,550,000 were sold in the United States and the remainder in Europe. Although in point of size, this output ranks below 1917, 1918, 1919, 1920 and 1921, it is nevertheless a record for the industry.

It represents production curtailed only from the flood stage of the post-war demand to the normal level of the reconstruction period. The fact that it has not yet found it necessary to cut down activities below the level of the reconstruction period is a very favorable market demand. Translated into tires, this offers a cheerful outlook for the Miller Rubber Company, Akron, Ohio, for a general upward trend of the business.

5,825 were charged with other offenses against the law.

Stolen property valued at \$449,730 was recovered, of which \$316,724.75 represents the value of automobiles recovered. September broke the record for stolen property recovered. During that month \$42,995.35 worth of value of jewelry was recovered. The stolen property recovered during the nine months was \$30,235.45, while live stock valued at \$3,241 was recovered. Stolen goods recovered during the first nine months of 1921 is of greater value than that recovered during the entire year of 1920.

In patrolling their districts the state troopers covered 1,159,995 miles. The motor cycle corps made much of this mileage in patrolling roads against automobile-traffic violators. First offenders were not arrested.

Big Tire Production.

Ten rubber companies made 75 per cent of the nineteen million tires turned out in 1921, according to the Miller Rubber Company, Akron, Ohio.

Colorado has the highest broad-gauge railroad and the highest skyline auto drive in the United States, at an altitude approximating 12,000 feet.

More than 75 per cent of all the automobile and truck tires made in the United States during 1921 were manufactured in Akron, according to the Miller Rubber Company, Akron, Ohio.

The standard of the world.

Nothing to Compare With Cadillac in Value

Value expresses itself in the new Type 61 Cadillac, not merely in countless miles of freedom from overhauling, adjustment or repair, but—as a result of that freedom—in lower cost of maintenance which lesser cars cannot equal.

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